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EXAMINER

SHELEHEDA, JAMES R

ART UNIT

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2424

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/880,848	Applicant(s) STALLWORTH, F. DAVID	
	Examiner JAMES SHELEHEDA	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-11,14,16,20-23 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-11,14,16,20-23 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/15/09 have been fully considered but they are not persuasive.

In response to applicant's arguments on page 10 regarding Tomich, it is noted that Tomich discloses where the headend unit will receive data from a plurality of sources, convert them into a common format and multiplex them together (column 8, lines 32-55). This signal is converted to an optical signal for transmission to the subscribers (column 3, line 31-column 4, line 9 and column 4, lines 38-46).

When the signal is received at the user system, the signal is converted from an optical signal to an electrical signal, demultiplexed, multiplexed and then converted to an optical signal for transmission to the next subscriber (Fig. 3-4; column 5, line 36-column 7, line 61).

Thus, Tomich clearly meets the current claim limitations, as he clearly discloses the use of a multiplexer located between the optical network unit and the subscriber, as there is a multiplexer both before and after the optical network unit. Therefore, applicant's arguments are not convincing.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Tomich et al. (Tomich) (5,983,068) (of record).

As to claim 1, while applicant's admitted prior art discloses a system for delivering to a plurality of subscribers located on a second side of a right of way a video signal (paragraphs 13-18), the system comprising:

(a) a central office located on a first side of a right-of-way (102, Fig. 1; paragraphs 15-17);

wherein the central office transmits both a telephony signal and a packetized data signal over the same fiber optic network (Fig. 1; paragraph 12-14), and

an optical network unit on the second side of the right of way opposite the first side (Fig. 1, 108, an ONU for each subscriber or group of subscribers; paragraph 7), such that the telephony signal and the packetized data signal must cross the right of way to reach the optical network unit (Fig. 1), wherein the optical network unit separates the combined signal into the video signal, the telephony signal and the packetized data signal (paragraph 14), and routes the video signal, the telephony signal and the packetized data signal to the subscriber (paragraph 14), the optical network unit connected to the fiber optic network via a dedicated fiber optic strand (Fig. 1; paragraphs 6-8),

it fails to specifically disclose a multiplexer on the second side of the right of way located between and in communication with the optical network unit and the subscriber, wherein the central office transmits signals to the multiplexer,

a wireless receiver located on the second side of the right-of-way the wireless receiver receiving the video signal and transmitting the video signal to the multiplexer, the multiplexer combining the video signal, the telephony signal and the data signal into a combined signal for routing to the subscribers.

In an analogous art, Tomich discloses a system for delivering to a plurality of subscribers located on a second side of a right of way a video signal that is free from a right-of-way franchise fee (Fig. 1; column 3, lines 31-49), comprising a multiplexer in communication with a central office (Fig. 1 and 6; head end unit, 20 for one particular neighborhood group; column 8, lines 26-46), wherein the central office transmits signals to an optical network unit on the second side of the right of way (each user set top box, 24; Fig. 3-4; column 4, lines 37-47), and in communication with the subscriber (Fig. 2; column 4, lines 24-37), a wireless receiver located on the second side of the right-of-way (102, 104, 106, Fig. 6), the wireless receiver receiving the video signal and transmitting the video signal to a multiplexer on the second side of the right of way located between and in communication with the optical network unit and the subscriber (where every subscriber home will receive the signals, de-multiplex, multiplex and then transit the signals as optical; Fig. 3-4; column 5, line 49-column 7, line 61), the multiplexer combining the video signal, the telephony signal and the data signal into a combined signal for routing to the subscriber (column 8, lines 26-46 and column 7, lines

54-61) for the typical benefit of allowing distribution to a plurality of subscribers in a neighborhood (column 2, lines 8-18), so as to increase the economic leverage of the group and create a better negotiation position for reducing the prices of services (column 1, lines 8-27).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify applicant's admitted prior art to include a multiplexer on the second side of the right of way located between and in communication with the optical network unit and the subscriber, wherein the central office transmits signals to the multiplexer, a wireless receiver located on the second side of the right-of-way the wireless receiver receiving the video signal and transmitting the video signal to the multiplexer, the multiplexer combining the video signal, the telephony signal and the data signal into a combined signal for routing to the subscribers, as taught in *combination* with Tomich, for the typical benefit of allowing distribution to a plurality of subscribers in a neighborhood, so as to increase the economic leverage of the group and create a better negotiation position for reducing the prices of services.

As to claim 5, Applicant's admitted prior art and Tomich disclose wherein the wireless receiver receives the video signal as an electronic signal (column 4, lines 10-23) and converts the signal to a fiber optical signal to deliver the video signal through a fiber optic strand to the multiplexer (column 4, lines 10-43).

As to claim 6, Applicant's admitted prior art and Tomich disclose wherein the wireless receiver is a radio receiver (RF satellite and wireless receivers; column 4, lines 10-23).

As to claim 8, Applicant's admitted prior art and Tomich disclose wherein the video signal is transmitted over a first wavelength and wherein the telephony signal is transmitted over a second wavelength that is different then from the first wavelength (wherein the signal types have different transmission frequencies and thus different wavelengths; column 4, lines 10-23).

As to claim 10, Applicant's admitted prior art and Tomich disclose wherein the right-of-way franchise fee is imposed by a local governing authority (wherein a right-of-way franchise fee *is* a government imposed fee, see applicant's specification at paragraph 15-18).

As to claim 7, while the above combination discloses a multiplexer to combine video and data signals, it fails to specifically disclose a wave division multiplexer.

Applicant's conceded that the prior art discloses the use of a wave division multiplexer (see specification at page 5, paragraph 13) when combining video and data signals for distribution over an optical network (see specification at page 5, paragraph 13) which is smaller and lighter then traditional copper and coaxial cables but can carry much more information (see specification at page 2, paragraph 2) to transmit the video

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and data signals over different frequencies (see specification at page 5, paragraph 13) for the benefit of ensuring that the data and video signals to be distinguished from one another over a fiber optic wire (paragraph 13) which carries more information over a smaller lighter wire (paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Tomich and applicant's conceded prior art as applied above to include a wave division multiplexer, as further taught by applicant's conceded prior art, for the benefit of ensuring that the data and video signals to be distinguished from one another when transmitting over a fiber optic wire.

As to claim 9, while the above combination discloses a multiplexer to combine a first video signal and a second data signal at different wavelengths, it fails to specifically disclose wherein the first signal is transmitted over a 1550 nanometer wavelength and the second signal is transmitted over a 1310 nanometer wavelength.

Applicant's conceded that the prior art discloses the use of multiplexer (see specification at page 5, paragraph 13) when combining video and data signals for distribution over an optical network (see specification at page 5, paragraph 13) which is smaller and lighter than traditional copper and coaxial cables but can carry much more information (see specification at page 2, paragraph 2) to transmit a first video signal over a 1550 nanometer wavelength (see specification at page 5, paragraph 13) and a second data signal over a 1310-nanometer wavelength (see Applicant's specification at page 5, paragraph 13) for the benefit of ensuring that the data and video signals to be

distinguished from one another over a fiber optic wire (paragraph 13) which carries more information over a smaller lighter wire (paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Tomich and applicant's conceded prior art to include wherein the first signal is transmitted over a 1550 nanometer wavelength and the second signal is transmitted over a 1310 nanometer wavelength, as taught in combination with applicant's conceded prior art, for the benefit of ensuring that the data and video signals to be distinguished from one another when transmitting over a fiber optic wire.

4. Claims 11, 13-16, 20-23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomich in view of Applicant's admitted prior art.

As to claims 11 and 30, while Tomich discloses a method for delivering to a plurality of subscribers a first signal that is subject to right-of-way franchise fees (Fig. 1; column 3, lines 31-49), wherein the method:

(a) transmitting a second signal and a third signal from a first side of the right of way (phone and cable, 108 and 110; column 4, lines 10-23, Fig. 1), through the right of way, to an optical network unit located on the second side of the right of way (Fig. 3-4; column 4, lines 37-47), wherein the first side is opposite the second side, the second signal comprising at least a voice signal (PSTN telephone signals; column 4, lines 10-24);

(b) receiving via a wireless communication the first signal on the second side of the right-of-way such that the first signal does not pass through the right-of-way (wireless signal received on the private residential property; Fig. 1), the first signal comprising at least a video signal (satellite video; column 4, lines 10-23),

(c) combining the first signal, the second signal and the third signal into a combined signal on the second side of the right of way at a multiplexer and multiplexing the first signal with the second and third signals using the multiplexer (Fig. 3-4; column 5, line 49-column 7, line 61), wherein the multiplexer is located between and in communication with the optical network unit and one of the plurality of subscribers (Fig. 3-4; column 5, line 49-column 7, line 61);

(d) routing the combined signal in the direction of the one of the plurality of subscribers (Fig. 1; column 8, lines 26-46 and column 7, lines 54-61), wherein the one of the plurality of subscribers is on the second side of the right-of-way (residential neighborhood; Fig. 1),

he fails to specifically disclose wherein the third signal comprises at least packetized data, the second and third signal transmitted through the via the same fiber optic network and a wave division multiplexer.

Applicant's admitted prior art discloses a system (Fig. 1) wherein both telephony signals and packetized data signals are multiplexed and transmitted over the same fiber optic network (paragraph 12) and the use of a wave division multiplexer (see specification at page 5, paragraph 13) when combining video and data signals for distribution over an optical network (see specification at page 5, paragraph 13) which is

smaller and lighter than traditional copper and coaxial cables but can carry much more information (see specification at page 2, paragraph 2) to transmit the video and data signals over different frequencies (see specification at page 5, paragraph 13) for the typical benefits of allowing telephone providers ways to capitalize on excess bandwidth by providing subscribers with expanded and integrated services (paragraph 12) and ensuring that the data and video signals to be distinguished from one another over a fiber optic wire (paragraph 13) which carries more information over a smaller lighter wire (paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Tomich's system to include wherein the third signal comprises at least packetized data, the second and third signal transmitted through the via the same fiber optic network and a wave division multiplexer, as taught in combination with applicant's admitted prior art, for the typical benefit of allowing telephone providers ways to capitalize on excess bandwidth by providing subscribers with expanded and integrated services and ensuring that the data and video signals to be distinguished from one another over a fiber optic wire.

As to claim 20, while Tomich discloses a method for delivering to a plurality of subscriber a first signal that is free of right-of-way franchise fees (Fig. 1; column 3, lines 31-49), wherein the method comprises:

(a) transmitting a second signal from a central office through a right of way (service providers providing the television, phone or data signals located outside of the

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local neighborhood; column 4, lines 10-23, Fig. 1) to an optical network unit (Fig. 3-4; column 4, lines 37-47), wherein the central office is located on a first side of the right of way and the optical network unit is located on a second side of the right of way opposite the first side (column 4, lines 10-23, Fig. 1), the second signal comprising at least a voice signal (via the PSTN; column 4, lines 10-23, Fig. 1);

(b) receiving the first signal at a wireless receiver (102, 104 and 106), located on the second side of the right-of-way (wireless signal received on the private residential property; Fig. 1), the first signal comprising at least a video signal (satellite video; column 4, lines 10-23, Fig. 1);

(c) transmitting the first signal from the wireless receiver to a multiplexer (column 8, lines 26-46 and column 7, lines 54-61) without crossing the right of way (Fig. 6), the multiplexer located between and in communication with the optical network unit and a local terminal (Fig. 3-4; column 5, line 49-column 7, line 61);

(d) combining the first signal and the second signal into a combined signal at the multiplexer (column 8, lines 26-46 and column 7, lines 54-61);

(e) routing the combined signal from the multiplexer to a local terminal (Fig. 1; column 8, lines 26-46 and column 7, lines 54-61) that is located on the second side of the right of way (residential neighborhood; Fig. 1);

(f) separating the combined signal into the first signal and the second signal at the local terminal (column 4, lines 24-47 and column 5, lines 36-57),

he fails to specifically disclose wherein the central office transmits a third signal comprising at least packetized data, the second signal and the third signal transmitted through the right of way via the same network.

Applicant's admitted prior art discloses a system (Fig. 1) wherein both telephony signals and packetized data signals are multiplexed and transmitted over the same fiber optic network from the central office (paragraph 12) for the typical benefit of allowing telephone providers ways to capitalize on excess bandwidth by providing subscribers with expanded and integrated services (paragraph 12).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Tomich's system to include wherein the third signal comprises at least packetized data, the second and third signal transmitted from the central office through the via the same fiber optic network, as taught in combination with applicant's admitted prior art, for the typical benefit of allowing telephone providers ways to capitalize on excess bandwidth by providing subscribers with expanded and integrated services.

As to claim 21, Tomich and applicant's admitted prior art disclose wherein the wireless receiver is a satellite receiver (column 4, lines 10-23) and receiving the first signal comprises receiving the first signal in a satellite communication and converting the first signal from an electronic signal to a fiber optical signal (column 4, lines 10-43).

As to claim 22, while the above combination discloses a multiplexer to combine video and data signals, they fail to specifically disclose a wave division multiplexer.

Applicant's conceded that the prior art discloses the use of a wave division multiplexer (see specification at page 5, paragraph 13) when combining video and data signals for distribution over an optical network (see specification at page 5, paragraph 13) which is smaller and lighter than traditional copper and coaxial cables but can carry much more information (see specification at page 2, paragraph 2) to transmit the video and data signals over different frequencies (see specification at page 5, paragraph 13) for the benefit of ensuring that the data and video signals to be distinguished from one another over a fiber optic wire (paragraph 13) which carries more information over a smaller lighter wire (paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Tomich and applicant's conceded prior art to include a wave division multiplexer, as taught by applicant's conceded prior art, for the benefit of ensuring that the data and video signals to be distinguished from one another when transmitting over a fiber optic wire.

As to claim 23, while the above combination discloses wherein separating the combined signals comprises transmitting the combined signal to a de-multiplexer that separates the combined signal into the first signal and the second signal (column 5, lines 37-57), they fail to specifically disclose a wave division de-multiplexer.

Applicant's conceded that the prior art discloses the use of a wave division multiplexer (see specification at page 5, paragraph 13) when combining video and data signals for distribution over an optical network (see specification at page 5, paragraph 13) which is smaller and lighter than traditional copper and coaxial cables but can carry much more information (see specification at page 2, paragraph 2) to transmit the video and data signals over different frequencies (see specification at page 5, paragraph 13) to a wave division de-multiplexer (required to separate the wave division multiplexed signals; see Applicant's specification at paragraphs 13-14) for the benefit of ensuring that the data and video signals to be distinguished from one another over a fiber optic wire (paragraph 13) which carries more information over a smaller lighter wire (paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Tomich and applicant's conceded prior art to include a wave division de-multiplexer, as taught by applicant's conceded prior art, for the benefit of ensuring that the data and video signals to be distinguished from one another when transmitting over a fiber optic wire.

As to claim 14, Tomich and Applicant's admitted prior art disclose wherein routing the combined signal comprises routing the combined signal from the wave division multiplexer to a splitter that is in communication with the subscriber (see Tomich at column 5, lines 37-57).

As to claim 16, Tomich and Applicant's admitted prior art disclose wherein the splitter includes a wave division de-multiplexer (required to separate the wave division multiplexed signals; see Applicant's specification at paragraphs 13-14), and the step of separating the combined signal comprises separating the combined signal with the wave division de-multiplexer (required to separate the wave division multiplexed signals; see Applicant's specification at paragraphs 13-14).

5. Claims 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomich and applicant's conceded prior art and further in view of Burns et al. (Burns) (6.298.373) (of record).

As to claims 29 and 31, while Tomich and applicant's admitted prior art disclose first (video), second (telephony) and third (packetized data) signals (as set forth in claims 20 and 30 above), and wherein the second and third signals both originate from the same service provider, they fail to disclose wherein the first (video) signal originates from the same service provider.

In an analogous art, Burns discloses a distribution system (Fig. 6) wherein a content provider will distribute content signals via two separate networks (Fig. 6), including wireless video signals via a satellite connection (column 11, line 49-column 12, line 34 and column 3, lines 32-40) and packetized data signals via a telephone network (column 6, lines 18-35) for the typical benefit supplementing an Internet connection via a secondary network to provide a low cost means to increase bandwidth and lower the latency of user requests (column 5, lines 29-43).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Tomich and applicant's admitted prior art to include wherein the first (video) signal originates from the same service provider, as taught by Burns, for the typical benefit supplementing an Internet connection via a secondary network to provide a low cost means to increase bandwidth and lower the latency of user requests.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information

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and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SHELEHEDA whose telephone number is

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(571)272-7357. The examiner can normally be reached on Monday - Friday, 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Sheleheda/
Primary Examiner, Art Unit 2424

JS